

	ANDHRA PRADESH STATE COUNCIL OF HIGHER EDUCATION
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**Model Syllabus for 4-Year UG Honours in B.Sc. (Home Science) as Major in
consonance with Curriculum framework w.e.f. AY 2026-27**

Prepared by Sri Venkateswara University, Tirupati

COURSE STRUCTURE

Year	Semester	Course	Title of the Course	No. of Hrs /Week	No. of Credits
II	III	5	Fundamentals of Food Science	3	3
			Fundamentals of Food Science-Practical	2	1
		6	Fundamentals of Textiles and Clothing	3	3
			Fundamentals of Textiles and Clothing-Practical	2	1
		7	Human Development	3	3
			Human Development-Practical	2	1

SEMESTER - III

COURSE 5: FUNDAMENTALS OF FOOD SCIENCE

Theory

Credits: 3

3 hrs/week

Outcomes of the course

At the end of the course the students will be able to

- 1 Interpret the importance and functions of food and its nutrients
- 2 Understand the composition and nutritive value of both animal and plant food
- 3 Able to identify different structures and assess the quality of egg
- 4 Knowledge on standardization of weights.

THEORY

UNIT –I Cereals, Pulses and Grams

- Cereals- Structure, composition, nutritive value of rice and wheat,
- Millets - composition, nutritive value processing, selection, and use in cookery
- Legumes - composition, nutritive value, and toxic constituents present in pulses.
- Fats and Oils – Classification, composition, smoking point of oil, factors affecting absorption of oil.

UNIT –II Fruits and Vegetables

- Vegetables - Classification, composition, nutritive value, selection of vegetables.
- Fruits - Composition, nutritive value, changes during ripening.
- Pigments, Enzymatic and non-enzymatic browning.
- Spices and condiments- medicinal value and role in cookery

UNIT –III Milk and Milk Products, egg , meat and poultry

- Milk - Composition, nutritive value, types of milk, pasteurization and homogenization of milk, changes in milk during heat processing.
- Egg - Structure, composition, classification, nutritive value, methods to assess the quality of eggs
- Meat -Structure, composition, nutritive value, selection of meat, post mortem changes in meat, aging, tenderness.
- Poultry – types, composition, nutritive value.

UNIT- IV Fish and marine foods

- Classification and types of marine foods – finfish, shellfish (prawns, crabs, lobsters, oysters, mussels, clams).
- Composition and nutritive value of fish, prawns, crabs
- Post-harvest changes, spoilage, and quality assessment of fish and shellfish.
- Preservation, and utilization of fish and marine by-products.

UNIT-V Methods of Cooking

- Methods of food preparation- moist heat, dry heat and combination methods
- Advantages and disadvantages dry and wet cooking.
- Effect of cooking on texture, flavour, digestibility and acceptability
- Losses of nutrients during different methods of cooking and factors affecting them

SEMESTER - III

COURSE 5: FUNDAMENTALS OF FOOD SCIENCE

Practical

Credits: 1

2 hrs/week

1. List out the common foods and to learn their names in Telugu, English, Hindi. Learn to identify the different food samples and to know their nutrient composition.
2. Standardization of weights and measures of various food items.
3. Cereals, pulse and vegetable preparations and calculation of nutritive values of recipe.
4. Milk, preparations and calculation of nutritive values of recipes.
5. Meat, egg preparations and calculation of nutritive values of recipes.

REFERENCES

1. Bamji MS, Krishnaswamy K, Brahman, (2016) Textbook of Human Nutrition, 4th edition. Oxford and IBH Publishing Co. Pvt. Ltd.
2. Longvah, T., Ananthan, R., Bhaskarachary, K. and Venkaiah, K. (2017). Indian Food Composition Tables, Published by NIN
3. Raheena Begum, (2013). Textbook of Food, Nutrition and Dietetics, 3rd edition, Sterling Publishers Pvt. Ltd.
4. Shubhangini A. Joshi, (2002). Nutrition and Dietetics, 2nd edition, Tata McGraw-Hill Publishing Company Ltd.
5. Srilakshmi, B., (2018). Nutrition Science, 6th edition, New Age International Publishers.
6. Swaminadhan S, (2005). Advanced Text book on foods & nutrition, Vol. I&II (2nd revised and enlarged) Bappco.
7. VijayaKhader, (2000). Food, nutrition & health, Kalyani Publishers.

CO-CURRICULAR ACTIVITIES

1. Student seminars on different nutrients.
2. Preparation of posters, charts, flashcards etc. related to different nutrients – Functions, RDA dietary sources, nutrient content of foods and deficiency symptoms.
3. Collections of food samples rich in particular vitamins and minerals like calcium, iron etc.
4. Visit to food stores, vegetable and fruit markets to study locally available foods.
5. Study projects to collect the data from people. Eg. Foods avoided or given in specific conditions.
 - Celebration of Important Days (National and International)
 - World's Breast Feeding Week(August 1st -7th)
 - Nutrition Week – September 1st - 7th
 - Nutrition Month – September month
 - Hand Washing Day – October 15th
 - World Food Day – October 16th

4- Year UG Honours, Major
Syllabus
(2026-27)
Semester-III

Model Question Paper

Time : 3hrs

Marks:75

Part-A

Answer any Five Questions. Each Question carries 3 Marks.

5x3=15

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.
- 8.
- 9.
- 10.

Answer the following questions. Each question carries 12 Marks

5x12=60

11. a) Unit-I
(Or)
b) Unit-I

12. a) Unit-II
(Or)
b) Unit-II

13. a) Unit-III
(Or)
b) Unit-III

14. a) Unit-IV
(Or)
b) Unit-IV

15. a) Unit-V
(Or)
b) Unit-V